

CLAIMS

1. A satellite digital audio radio multipoint distribution system comprising:
first means for providing a satellite digital audio radio signal;
second means for transforming said satellite digital audio radio signal to a converted signal;
third means for distributing said converted signal and plural fourth means for receiving said distributed converted signal and providing plural output signals in response thereto.
2. The invention of Claim 1 wherein said first means includes a satellite antenna and a satellite receiver.
3. The invention of Claim 2 wherein said first means includes a terrestrial repeater.
4. The invention of Claim 2 wherein said satellite receiver decodes a stream of data received from a satellite and recodes said stream of data using a satellite radio terrestrial broadcast format.
5. The invention of Claim 4 wherein said format is an XM radio format.
6. The invention of Claim 5 wherein said format is multi-carrier modulation.
7. The invention of Claim 6 wherein said converted signal is an XM radio terrestrial intermediate frequency multi-carrier modulated signal.

8. The invention of Claim 1 wherein said first means is a storage medium on which satellite digital audio radio service signals have been stored.

9. The invention of Claim 8 wherein said storage medium is a digital video disc.

10. The invention of Claim 1 wherein each of said plural fourth means includes a respective user interface to allow for channel selection and audio processing.

11. The invention of Claim 1 wherein each of said plural fourth means is a satellite digital audio radio service receiver.

12. The invention of Claim 1 wherein each of said plural fourth means includes a channel decoder adapted to receive said converted signal and provide a digital bitstream output in response thereto.

13. The invention of Claim 12 wherein each of said plural fourth means further includes a source decoder digital signal processor adapted to receive said digital bitstream and provide said output signal in response thereto.

14. The invention of Claim 1 further including a distribution system for connecting said first means to each of said plural fourth means.

15. The invention of Claim 14 wherein said distribution system is a cable distribution system.

16. The invention of Claim 1 wherein said output signal is an audio output signal.

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17. A satellite digital audio radio multipoint distribution system comprising:
a satellite antenna for receiving a satellite digital audio radio signal;
a terrestrial repeater connected to set antenna for decoding said satellite signal and
recoding said signal into a satellite radio terrestrial broadcast format;
a system for distributing recoded signal, and
plural satellite digital audio radio service receivers adapted to receive said recoded
signals from said distributing system and provide audio and/or visual output signals in
response thereto.

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18. The invention of Claim 17 wherein said format is an XM radio format.
19. The invention of Claim 18 wherein said format is multi-carrier modulation.
20. The invention of Claim 19 wherein said converted signal is an XM radio terrestrial intermediate frequency multi-carrier modulated signal.
21. The invention of Claim 17 wherein each of said plural receivers includes a respective user interface to allow for channel selection and audio processing.
22. The invention of Claim 17 wherein each of said plural receivers includes a channel decoder integrated circuit adapted to receive said converted signal and provide a digital bitstream output in response thereto.
23. The invention of Claim 22 wherein each of said plural receivers further includes a source decoder digital signal processor adapted to receive said digital bitstream and provide said output signal in response thereto.

24. The invention of Claim 17 wherein said distribution system is a cable distribution system.

25. The invention of Claim 17 wherein said distribution system is a wireless distribution system.

26. The invention of Claim 17 wherein said distribution system is a fiber-optic distribution system.

27. The invention of Claim 17 wherein said output signal is an audio output signal.

Sub A8 28. A method for distributing a satellite digital audio radio signal to multiple receivers including the steps of:

receiving a satellite digital audio radio signal and distributing a converted signal in response thereto and

receiving said distributed downconverted signal via plural receivers and providing plural output signals in response thereto.

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